

CONTENTS VOLUME 46, 1989

Research Papers

Effects of changing solar radiation on canopy-air temperatures of cotton and soybean D.A. Pennington and L. Heatherly (Stoneville, MS, U.S.A.)	1
Aerodynamic properties of partial canopies J.L. Hatfield (Lubbock, TX, U.S.A.)	15
Comparison of vegetation indices derived from NOAA/AVHRR data for Sahelian crop assessments A. van Dijk, S.L. Callis and W.L. Decker (Columbia, MO, U.S.A.)	23
The estimation of soil moisture deficits using meteorological models at an upland moorland site in northern England J.G. Lockwood, C.A. Jones and R.T. Smith (Leeds, Gt. Britain)	41
Above-ground dry matter accumulation by <i>Eucalyptus grandis</i> and its relation to standard meteorological data G.F. Byrne (O'Connor, A.C.T., Australia)	65
Statistical procedures for evaluating group and phase velocities of scalar quantities measured in an array D.G. Yerg (Houghton, MI, U.S.A.)	75
Estimate of the aerodynamic roughness parameters over an incomplete canopy cover of cotton W.P. Kustas (Beltsville, MD, U.S.A.), B.J. Choudhury (Greenbelt, MD, U.S.A.), K.E. Kunkel (Las Cruces, NM, U.S.A.) and L.W. Gay (Tucson, AZ, U.S.A.)	91
The relationship between daylight evaporation from short vegetation and the USWB class A pan W.H. van Zyl, J.M. de Jager and C.J. Maree (Bloemfontein, South Africa)	107
The accuracy of evaporation measurements from small lysimeters W.A. Dugas and W.L. Bland (Temple, TX, U.S.A.)	119
Micrometeorological measurements in Les Landes forest during HAPEX-MOBILHY J.H.C. Gash, W.J. Shuttleworth, C.R. Lloyd (Wallingford, Gt. Britain), J.-C. André, J.-P. Goutorbe (Toulouse, France) and J. Gelpe (Cestas, France)	131
An analysis of the criticism of Thornthwaite's equation for estimating potential evapotranspiration A.R. Pereira and A. Paes de Camargo (Campinas, Brazil)	149
Physiologically based dendroclimate models for effects of weather on red spruce basal-area growth C.A. Federer, L.M. Tritton, J.W. Hornbeck and R.B. Smith (Durham, NH, U.S.A.)	159
Rainfall patterns in relation to peat extraction and silage making S.M. Ward (Dublin, Ireland)	173

Research Papers

Estimation of sensible heat flux from measurements of surface radiative temperature and air temperature at two meters: application to determine actual evaporation rate J.P. Brunel (Glen Osmond, S.A., Australia)	179
Accuracy of hourly air temperatures calculated from daily minima and maxima D.C. Reicosky, L.J. Winkelman, J.M. Baker and D.G. Baker (Morris, MN, U.S.A.)	193
Plant high night temperature tolerance zones: describing and predicting summer night temperature patterns and the southern limits of plant adaptation D.L. Deal and J.C. Raulston (Raleigh, NC, U.S.A.)	211

Simulation of oil palm growth and yield

D.W.G. Van Kraalingen (Wageningen, The Netherlands), C.J. Breure (London, Gt. Britain) and C.J.T. Spitters (Wageningen, The Netherlands)	227
Une échelle de temps biométéorologique pour l'estimation du degré de précocité de la végétation R. Oger and L. Glibert (Gembloux, Belgium)	245
Energy balance determinations close to the soil surface using a micro-Bowen ratio system H. Ashktorab, W.O. Pruitt, K.T. Paw U and W.V. George (Davis, CA, U.S.A.)	259

Research Papers

A laser scanning instrument for measuring crop geometry P.J. Walklate (Bedford, Gt. Britain)	275
Estimating potential evapotranspiration: the effect of random and systematic errors S.J. Meyer, K.G. Hubbard and D.A. Wilhite (Lincoln, NE, U.S.A.)	285
Evaporation from a lupin crop: a comparison of methods F.X. Dunin (Canberra, A.C.T., Australia), R.A. Nulsen, I.N. Baxter (South Perth, W.A., Australia) and E.A.N. Greenwood (Wembley, W.A., Australia)	297
A numerical model for simulating the radiation regime within a deciduous forest canopy H. Wang and D.D. Baldocchi (Oak Ridge, TN, U.S.A.)	313
The exponential polynomial model (EPM) of yield forecasting for spring wheat based on meteorological factors and phenophase L. Kuchar (Wroclaw, Poland)	339
Modelling light distribution within the canopy of the marsh grass <i>Spartina alterniflora</i> as a function of canopy biomass and solar angle J.T. Morris (Columbia, SC, U.S.A.)	349
Book Review	363
Announcement	365
Contents Vol. 46 (1989)	367

